

CLAIMS

1. A method of keeping an aqueous solution of sodium borate liquid at a storage temperature, in which method, in order to pass said solution from an initial
5 temperature to the storage temperature, said aqueous solution of sodium borate is subjected to heat treatment comprising at least one cooling or heating operation at a speed lying in the range $1^{\circ}\text{C}/\text{min}$ to $100^{\circ}\text{C}/\text{min}$, to reach a holding temperature lying in the range -50°C to $+200^{\circ}\text{C}$,
10 followed by holding the holding temperature for a time lying in the range 1 s to 100 h, followed by cooling or heating at a speed lying in the range $1^{\circ}\text{C}/\text{min}$ to $100^{\circ}\text{C}/\text{min}$.
- 15 2. A method according to claim 1, characterized in that the heat treatment includes at least two holding operations at different holding temperatures.
3. A method according to claim 1 or claim 2,
20 characterized in that prior to performing the heat treatment, the aqueous solution of sodium borate is at an initial temperature lying in the range 100°C to 180°C , and after performing the heat treatment, the aqueous solution of sodium borate is at a storage temperature
25 lying in the range -50°C to $+300^{\circ}\text{C}$.
4. A method according to claim 3, characterized in that the storage treatment lies in the range -20°C to $+50^{\circ}\text{C}$.
- 30 5. A method according to any one of claims 1 to 4, characterized in that the aqueous solution of sodium borate contains 5% to 65% by weight of sodium borate.
6. A method according to claim 5, characterized in that
35 the aqueous solution of sodium borate further contains 0% to 10% by weight of soda.

7. A method of generating hydrogen in which sodium borohydride is caused to react with water and both a gaseous mixture constituted mainly of hydrogen and an aqueous solution of sodium borate are extracted
- 5 therefrom, the method being characterized in that the aqueous solution of sodium borate is subjected to the method according to any one of claims 1 to 6.
8. The use of the method of claim 7 to feed hydrogen to a
- 10 fuel cell.
9. The use of the method of claim 8, characterized in that the fuel cell is the fuel cell of a motor vehicle.
- 15 10. The use of the method according to claim 7 for generating hydrogen used in medicine, in the agrifood industry, in the fabrication of electronic components, and/or in the implementation of heat treatments on metal products.